LISTING OF THE CLAIMS

1. (Currently Amended) A method for characterising OSI-materials, comprising:

~~with which the material is introduced~~ introducing the material into a measurement cell ~~and is subjected~~;

subjecting the material to a gas mixture containing oxygen~~, and after~~;

permitting a certain time or ~~at certain~~ one or more time intervals to elapse~~,~~;

measuring and oxygen concentration of a defined volume part of the gas mixture ~~is measured with regard to its oxygen concentration in~~using a measurement circuit, in which the oxygen concentration together with the time component represents a characterisation of the OSI-material,

wherein~~characterised in that~~ the OSI-material in the measurement cell is subjected to the gas mixture circulated in a closed reaction circuit, and the defined volume part is conveyed into ~~a~~ the measurement circuit ~~containing a gas, for the measurement of the oxygen concentration~~.

2. (Currently Amended) ~~A~~ The method according to claim 1, ~~characterised in that~~wherein O_2-scavengers and/or O_2-indicators are applied as the OSI-materials.

3. (Currently Amended) ~~A~~ The method according to claim 1 ~~or claim 2, characterised in that~~, wherein, for characterising the material in the measurement cell, in particular an O_2-scavenger, at least one of: (i) ~~the~~ an oxygen reduction in ~~the~~ a gas flow in dependence on ~~the~~ a mass of the material is measured as a capacity variable ~~and/or~~; and (ii) the temporal change of the oxygen reduction is measured as a kinetic variable.

4. (Currently Amended) ~~A~~ The method according to ~~one of the claims 1 to 3, characterised in that the~~ claim 1, wherein a colour and/or a colour change of the material in dependence on the oxygen concentration is measured, for characterising the material in the measurement cell, in particular an O_2-indicator .

5. (Currently Amended) ~~A~~ The method according to claim 4, ~~characterised in that~~ wherein the colour and/or the colour change and/or the colour change in dependence on ~~the~~ an integral of the oxygen concentration ~~x~~ multiplied by time is measured.

6. (Currently Amended) ~~A~~ The method according to ~~one of the claims 1 to 5, characterised in that~~ claim 4, wherein, with O_2-scavenger/O_2-indicator systems, the colour change of the O_2-indicator in dependence on the residual capacity of the O_2-scavenger is determined.

7. (Currently Amended) ~~A~~ The method according to ~~one of the claims 1 to 6, characterised in that~~ claim 1, wherein, for initialising the OSI-material, the gas flow in the reaction circuit is subjected to humidity.

8. (Currently Amended) ~~A~~ The method according to ~~one of the claims 1 to 6, characterised in that~~ claim 1, wherein, for initialising the OSI-material, ~~this in~~ the measurement cell is subjected to UV-radiation.

9. (Currently Amended) ~~A~~ The method according to ~~one of the claims 1 to 8, characterised in that the~~ claim 8, wherein an initialisation point or initialisation region of the OSI-material is determined depending on ~~the~~ at least one of a relative humidity, ~~or the~~ an intensity, ~~and/or the~~ and a wavelength region of the radiation.

10. (Currently Amended) A device for characterising OSI-materials, comprising:

~~with~~ a closed reaction circuit ~~and with a measurement circuit, wherein the reaction circuit (1) comprises~~having a device for ~~the supply of~~ supplying a gas flow containing oxygen, a pump ~~(5)~~ for delivery of the gas flow, and a measurement cell ~~(6)~~ for receiving the OSI-material~~,~~; and

~~the~~ a measurement circuit ~~(2) comprises~~having a sensor arrangement ~~(11)~~ for detecting oxygen, and an evaluation unit ~~(12)~~,

wherein a part of the gas flow circulated in the reaction circuit may be conveyed into the measurement circuit with a defined volume.

11. (Currently Amended) ~~A~~ The device according to claim 10, ~~characterised in that~~ wherein the measurement circuit is a closed measurement circuit and comprises a device ~~(9)~~ for the supply of ~~a~~ the gas flow, a pump ~~(10)~~ for delivery of the gas flow, wherein a part ~~(4)~~ of the reaction circuit ~~(1)~~, with the defined volume, may be switched into the measurement circuit ~~(2)~~ via valves ~~(7)~~.

12. (Currently Amended) ~~A~~ The device according to claim ~~10 or claim~~ 11, ~~characterised in that~~wherein the measurement circuit ~~(2)~~ comprises a switch-over branch ~~(3)~~ which may be switched into the reaction circuit ~~(1)~~ via the valves when the part of the reaction circuit ~~(1)~~ with the defined volume is switched into the measurement circuit.

13. (Currently Amended) ~~A~~ The device according to claim 10, ~~characterised in that~~wherein the sensor arrangement ~~(11)~~ contains at least one oxygen-sensitive sensor, and the evaluation unit ~~(12)~~ contains an integrator.

14. (Currently Amended) ~~A~~ The device according to ~~one of the claims 10 to 13, characterised in that~~ claim 10, wherein the device ~~(8)~~ for the supply of the gas flow containing oxygen into the reaction circuit ~~(1)~~ is connected to a humidification unit ~~(15)~~, which subjects the gas flow to a humidification ~~necessary~~ for the initialisation of the material in the measurement cell ~~(6)~~.

15. (Currently Amended) ~~A~~ The device according to ~~one of the claims 10 to 14, characterised in that~~ claim 10, wherein the measurement cell ~~(6)~~ is transparent to settable wavelength regions.

16. (Currently Amended) ~~A~~ The device according to 15, ~~characterised in that~~ wherein a UV-radiation source which irradiates the material for its initialisation, is allocated to the measurement cell ~~(6)~~.

17. (Currently Amended) ~~A~~ The device according to ~~one of the claims 10 to 16, characterised in that~~claim 1, further comprising a device for measuring the colour and/or the colour change of the material ~~is~~ allocated to the measurement cell.

18. (Currently Amended) ~~A~~ The device according to ~~one of the claims 10 to 17, characterised in that~~ claim 10, wherein the reaction circuit comprises a sample loop ~~(4)~~ containing the defined volume part, which may be switched into the measurement circuit ~~(2)~~ via multi-way valves ~~(7)~~.

19. (Currently Amended) ~~A~~ The device according to ~~one of the claims 10 to 18, characterised in that~~ claim 10, wherein the components of the reaction circuit ~~(1)~~ and of the measurement circuit ~~(2)~~ are encapsulated.